Spin meeting minute, 5/24/2006

Fanglei presented the analysis of the high precision polarization profile measurements taken recently for horizontal plane with 10% and 15% cold snake. The re-bin of the data with normalized event rate (event rate/intensity) is in progress. She replotted the horizontal profiles as normalized one (measured polairzation devided by the fitted initial polarization). It showed the slightly better effeciency for 10% cold snake case. Woody warned that the un-optimized setup for the 15% cold snake could result lower polarization as shown in the data, although there may be some difficulties to optimize it.

Junpei presented the ratio of Blue and Yellow polarization measured at store (profile measurements)vs. AGS polarization measurements (fixed target) up-to-date in May (May 1st -May 24th). The average ratio is 0.97 ± 0.01 for blue (blue/AGS) and 0.94 ± 0.01 for yellow (yellow/AGS). He averaged the end of store measurements with both fixed target and profile measurements. They are 1.03 ± 0.01 for blue and 1.05 ± 0.01 for yellow. He used these ratios to convert the RHIC/AGS ratio for fixed target in RHIC, assuming the same profiles at the end of store. Then the ratio for fixed targets are 1.00 ± 0.01 for blue and 0.99 ± 0.01 for yellow (AtR spin mismatch is not included, which is small anyway). Fanglei calculated the ratio of AGS fixed target vs profile measurements based on the profile measurement after the meeting. It is 1.03 for 10% cold snake and 1.06 for 15% cold snake. They clearly indicate a flatter profile for 10% cold snake. The value for 10% cold snake agrees with ratio at end of RHIC store.

Haixin